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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 06/19/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

PAL

Office Action Summary

Application No.

09/289,789

Applicant(s)

RUBERG, ALAN T.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) 2-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 36-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to adequately teach the claimed limitations "a thin client" as recited in claims 56, 57, 60, 62, 65, 66, 67, and 68.

In the application as filed, there does not appear to be any detailed description or disclosure of a thin client. At best, the specification discloses a network with clients and servers. However, there is no specific disclosure of thin client. Applicant fails to disclose the specific operations identified above in the specification as filed.

2. Claims 56, 57, 60, 62, and 65 – 68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants recite "a thin client" as in claims 56, 57, 60, 62, 65, 66, 67, and 68. There does not appear to be a written description of the claimed limitation in the application as filed, for the reasons set forth in the objection to the specification.

Claim Objections

3. Claim 48 is objected to because of the following informalities: claim 48 (line 1) refers to the apparatus of claim 48. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 36 – 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,546,419 to Humpleman in view of U.S. Patent No. 6,223,289 to Wall.

As to claim 1, Humpleman teaches, a device manager (Network Object Request Broker such as Home Network Object Request Broker, HNORB 79, Fig. 19; column 16, lines 39 – 61) for providing a device driver (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42) for a device (server devices 14, Fig. 3; column 5, lines 5 – 13) comprising:

a device service (remote service application; column 11, line 50 – column 12, line 10) for requesting a device;

a remote bus proxy (proxy through a translation server) for communicating with a client device (sending device 120 can send the data to the receiving device 122 by proxy through a translation server 124, Fig. 23; column 27, lines 13 – 32); and

a remote device driver (control program) coupled to the client device (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42).

Humpleman teaches controlling access to remote devices (the HNORB 79 and the IL 80, can be connected directly to the Internet, such that selected home devices can be accessed from outside of a local home network 10...authorized users with the appropriate stream encryption can access a DVD changer in the user's primary home; column 16, lines 51 – 61) but does not explicitly disclose controlling communications between the device server and remote device driver and approving requests to read or send data to remote devices and control accessibility to the remote devices.

However, Wall teaches a device manager for controlling communications between the device service and the remote device driver (Authentication manager 204 verifies the challenge response with user information retained in authentication database 218...when the user is authenticated, the user is given access to a session, Fig. 2; column 6, line 64 – column 7, line 2), approving requests to read or send data to remote devices and controlling accessibility to the remote devices (when a service is started by a session-aware server application, a service connect message is sent to session manager 206...if the service has the proper authorization, session manager 206 adds the service to the list of services for the session and sends a message to the service to direct I/O to network terminal 202, Fig. 2; column 11, lines 59 – 65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teaching of controlling communications between the device server

and remote device driver and approving requests to read or send data to remote devices and control accessibility to the remote devices as taught by Wall to the invention of Humpleman because this would ensure that only authorized users can have access to the remote devices.

As to claim 37, Humpleman teaches providing access to one or more remote devices over a network, comprising:

a remote device driver (control program) coupled to one or more devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42);

one or more driver services (remote service application; column 11, line 50 – column 12, line 10) configured to remotely control one or more of the devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42), wherein the remote device driver tracks which of the one or more driver services communicates with which of the one or more devices (a session manager 36 with a user interface for displaying selection information for a user to select and control the server devices 14 SERVER1, SERVER2 and other server devices 14 such as SERVER3 and SERVER4, Fig. 9; column 8, lines 3 - 16); and

a device manager (HNORB) configured to register (register method) one or more of the driver services with the remote device driver to access one or more of the devices (a device 14 can remotely call a "register" method of HNORB to pass the device interface as one or more parameters; column 17, lines 10 – 15);

As to a device manager that approve requests to read data from one or more of the devices, to approve requests to send data to one or more of the devices and to control accessibility to one or more of the devices, see the rejection to claim 1 above.

As to claim 53, Humpleman teaches providing access to one or more remote devices over a network, comprising:

receiving by a device manager (Network Object Request Broker such as Home Network Object Request Broker, HNORB 79, Fig. 19; column 16, lines 39 – 61) of a device request from a driver service (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42);

registering (register method) by the device manager (HNORB) of the driver service with a remote device driver (a device 14 can remotely call a "register" method of HNORB to pass the device interface as one or more parameters; column 17, lines 10 – 15); and

communicating by the driver service (remote service application; column 11, line 50 – column 12, line 10) with a remote device via the remote device driver (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42);

As to controlling accessibility to the remote device, approving requests to read from the remote device, and approving requests to send data to the remote device, see the rejection to claim 1 above.

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As to claim 64, Humpleman teaches providing access to one or more remote devices over a network, comprising:

one or more remote devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42);

a terminal locally coupled to the one or more remote devices, the terminal comprising a first processor and first memory, the first memory comprising first computer readable programming code for execution by the first processor (server device itself may reduce the processing and storage requirements of the client devices 12 in networks with several server devices 14; column 5, lines 25 – 33), wherein the first computer readable program code comprises a remote device driver coupled to the one or more remote devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42); and

a server coupled to the terminal over a network, the server comprising a second processor and second memory, the second memory comprising second computer readable program code for execution by the second processor (server device itself may reduce the processing and storage requirements of the client devices 12 in networks with several server devices 14; column 5, lines 25 – 33), wherein the second computer readable program code comprises (server devices 14, Fig. 3; column 5, lines 5 – 13):

one or more driver services (remote service application; column 11, line 50 – column 12, line 10) configured to remotely control one or more of the devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42), wherein the remote device driver tracks which of the one or more driver services communicates with which of the one or more devices (a session manager 36 with a user interface for displaying selection information for a user to select and control the server devices 14 SERVER1, SERVER2 and other server devices 14 such as SERVER3 and SERVER4, Fig. 9; column 8, lines 3 - 16); and

a device manager (HNORB) configured to register (register method) one or more of the driver services with the remote device driver to access one or more of the remote devices (a device 14 can remotely call a "register" method of HNORB to pass the device interface as one or more parameters; column 17, lines 10 – 15);

As to approving requests to read data from the one or more remote devices, approving requests to send data to the one or more remote devices, and to controlling accessibility to the one or more remote devices, see the rejection to claim 1 above.

As to claim 36, Humpleman teaches device manager is further adapted to discover the device service (HNORB 79 includes a software agent for use by one device 14 to discover the existence of other devices 14 connected to the network 10, Fig. 19; column 16, lines 44 – 50), enable the device service to use the remote devices via the remote device driver (HNORB software agent organizes device names into a naming hierarchical tree structure, organizes device interfaces into said searchable

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Interface Library, and provides device interfaces to a device requesting interface information; column 16, lines 46 – 50), notify other device services of an availability of the remote devices (HNORB and IL can provide the controller device A with a reference to the controlled device B, whereby the device A can generate remote calls to the device B native functions just as calls to the local device A native function; column 18, lines 17 – 28), and track a connection of the remote devices with the device service (device 14 and the HNORB&IL can establish a point-to-point Transmission Control Protocol, TCP, or User Datagram Protocol, UDP, connection for registration, interface request and fetch, and device lookup services; column 17, lines 2 – 10).

As to claim 38, Humpleman teaches the one or more driver services (remote service application; column 11, line 50 – column 12, line 10) and the device manager reside (Network Object Request Broker such as Home Network Object Request Broker, HNORB 79, Fig. 19; column 16, lines 39 – 61) in a server domain (middleware layer 98 can be located in a third device 96 or in a separate control hub; column 16, lines 50 – 60) coupled across a network (home network 10, Fig. 19) to the remote device driver (control program) that resides in a desktop unit domain (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42).

As to claim 39, Humpleman does not teach a Human Interface Device. However, Wall teaches a Human Interface Device (Human Interface Devices 702, Fig. 7; column 4, lines 38 – 67) for providing a user interface (display and input device is a human interface device) to operate the one or more devices (data sources or services) and a

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plurality of servers (one computer may have one or more services, or a service may be implemented by one or more computers...the service provides computation, state, and data to the HID and the service is under the control of a common authority or manager; column 4, lines 38 – 67) for providing a plurality of computational services (computation functions) removed from the HID (state and computation functions have been removed from the HID and reside on data sources or services; column 4, lines 38 – 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teaching of a Human Interface Device as taught by Wall to the invention of Humpleman because HID allows users to access computational services and requires less storage space, less memory, and often less computational power (column 1, lines 50 – 55 of Wall).

As to claim 40, Humpleman as modified teaches the computational services (computational service providers) comprise a computational power for the HID and a state maintenance for the HID (computational Service Providers...the computational power and state maintenance is found in the service providers, or services...the service provides computation, state, and data to the HID and the service is under the control of a common authority or manager; column 4, lines 57 – 67 of Wall).

As to claim 41, Humpleman as modified teaches the one or more devices are locally connected to the HID (the interconnection fabric is any of multiple suitable communication paths for carrying data between the services and the HIDs...the interconnect fabric is a local area network; column 5, lines 8 – 18 of Wall).

As to claim 42, Humpleman as modified teaches the HID can only operate the one or more devices via the one or more driver services residing in the server domain (HID is the means by which users access the computational services provided by the services...HID consists of a display 726, a keyboard 724, mouse 725, and audio speakers 727...the HID includes the electronics need to interface these devices to the interconnection fabric and to transmit to and receive data from the services, Fig. 7; column 5, lines 18 – 25 of Wall).

As to claim 43, Humpleman as modified teaches the one or more driver services (remote service application; column 11, line 50 – column 12, line 10 of Humpleman) and the device manager (Network Object Request Broker such as Home Network Object Request Broker, HNORB 79, Fig. 19; column 16, lines 39 – 61 of Humpleman) reside in a server domain (middleware layer 98 can be located in a third device 96 or in a separate control hub; column 16, lines 50 – 60 of Humpleman) coupled across a network (home network 10, Fig. 19 of Humpleman) to the remote device driver (control program) and wherein the remote device driver resides in a Human Interface Device for providing a user interface to operate the one or more devices (source server device 14, includes a control program 20 for controlling data stream source hardware 32 of the source server device 14, Figs. 4 and 8; column 8, lines 30 – 42 of Humpleman). As to a Human Interface Device, see the rejection to claim 39 above.

As to claim 44, Humpleman teaches a bus device driver locally coupling the remote device driver to the one or more devices (communication link 16 can include a 1394 serial bus providing a physical layer for sending and receiving data between the

various connected home devices; column 4, lines 40 – 46), and a bus proxy remotely (proxy through a translation server) coupling the one or more driver services to the remote device driver (sending device 120 can send the data to the receiving device 122 by proxy through a translation server 124, Fig. 23; column 27, lines 13 – 32).

As to claim 45, this is a combination of claims 41 and 42; see the rejection to claims 41 and 42 above.

As to claim 46, Humpleman as modified teaches a session manager configured to associate one or more sessions with one or more of the driver services (Session manager 206 maintains session database 220 that contains mappings between users, sessions, and services; column 8, lines 3 – 10 of Wall), and an authentication manager configured to associate the one or more sessions with the HID (authentication manager is responsible for ensuring the legitimacy of a user and associating a user with a session; column 11, line 65 – column 12, line 7 of Wall).

As to claim 47, Humpleman as modified teaches the device manager is further configured to enforce a device access policy (information in the authentication database) for registering the one or more driver services (Authentication manager 204 verifies the challenge response with user information retained in authentication database 218; column 6, lines 64 – 67 of Wall).

As to claim 48 (note the claim objection above), Humpleman teaches the device manager is further configured to locate the one or more devices and to maintain an inventory of the one or more devices and respective controlling driver services (HNORB and IL can provide the controller device A with a reference to the controlled device B,

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whereby the device A can generate remote calls to the device B native functions just as calls to the local device A native function; column 18, lines 17 – 28).

As to claim 49, Humpleman as modified teaches notifying a first driver service of a loss of a network connection to a first device when an associated session of the HID ends (network terminal 202 notifies authentication manager 204, via a disconnect message, which notifies session manager 206, via a disconnect message...session manager 206 notifies services 230-238, via a disconnect message, which terminate their transmission of display commands to network terminal 202; column 7, lines 32 – 50 of Wall).

As to claim 50, Humpleman as modified teaches the device manager is further configured to notify the remote device driver that the first driver service is no longer permitted to control the first device (session manager 206 notifies services 230-238, via a disconnect message, which terminate their transmission of display commands to network terminal 202; column 7, lines 32 – 50 of Wall).

As to claim 51, Humpleman as modified teaches the remote device driver is configured to notify the device manager of a configuration change in the one or more devices (open connection can be used to notify either session manager 206 or the service that the other has abnormally, or otherwise, terminated; column 9, lines 20 – 31 of Wall).

As to claim 52, Humpleman as modified teaches the remote device driver comprises a filter for permitting and denying access by one or more of the driver services and wherein the filter is provided by the device manager via the network

(Authentication manager 204 verifies the challenge response with user information retained in authentication database 218; column 6, lines 64 – 67 of Wall).

As to claim 54, Humpleman as modified teaches sending device configuration information by the remote device driver to the device manager (open connection can be used to notify either session manager 206 or the service that the other has abnormally, or otherwise, terminated; column 9, lines 20 – 31 of Wall).

As to claim 55, Humpleman as modified teaches locally exposing the remote device to the remote device driver via a bus device driver (the interconnection fabric is any of multiple suitable communication paths for carrying data between the services and the HIDs...the interconnect fabric is a local area network; column 5, lines 8 – 18 of Wall).

As to claim 56, Humpleman as modified teaches associating a session with the driver service via a session manager (Session manager 206 maintains session database 220 that contains mappings between users, sessions, and services; column 8, lines 3 – 10 of Wall), and associating the session with a thin client via an authentication manager (authentication manager is responsible for ensuring the legitimacy of a user and associating a user with a session; column 11, line 65 – column 12, line 7 of Wall). As to a thin client note the 112 rejection above.

As to claim 57, Humpleman as modified teaches the remote device is locally connected to the thin client (the interconnection fabric is any of multiple suitable communication paths for carrying data between the services and the HIDs...the interconnect fabric is a local area network; column 5, lines 8 – 18 of Wall) and wherein

the thin client (HID) can only operate the remote device via the driver service (HID is the means by which users access the computational services provided by the services...HID consists of a display 726, a keyboard 724, mouse 725, and audio speakers 727...the HID includes the electronics need to interface these devices to the interconnection fabric and to transmit to and receive data from the services, Fig. 7; column 5, lines 18 – 25 of Wall). As to a thin client note the 112 rejection above.

As to claim 58, Humpleman as modified teaches registering the driver service by the device manager of the driver service further comprises enforcing a device access policy (Authentication manager 204 verifies the challenge response with user information retained in authentication database 218; column 6, lines 64 – 67 of Wall).

As to claim 59, Humpleman teaches maintaining in the remote device driver an association between the remote device and the driver service (service has the proper authorization, session manager 206 adds the service to the list of services for the session; column 11, lines 57 – 65 of Wall).

As to claim 60, Humpleman teaches maintaining by the device manager of an inventory of devices located on a thin client and respective controlling driver services for the inventoried devices (HNORB and IL can provide the controller device A with a reference to the controlled device B, whereby the device A can generate remote calls to the device B native functions just as calls to the local device A native function; column 18, lines 17 – 28). As to a thin client note the 112 rejection above.

As to claim 61, Humpleman as modified teaches notifying the driver service by the device manager of a loss of a network connection to the remote device (network

terminal 202 notifies authentication manager 204, via a disconnect message, which notifies session manager 206, via a disconnect message...session manager 206 notifies services 230-238, via a disconnect message, which terminate their transmission of display commands to network terminal 202; column 7, lines 32 – 50 of Wall).

As to claim 62, Humpleman as modified teaches the loss of the network connection to the remote device is in response to the closing of an associated session (notify session manager via a disconnect message) by a user on a thin client (network terminal 202 notifies authentication manager 204, via a disconnect message, which notifies session manager 206, via a disconnect message...session manager 206 notifies services 230-238, via a disconnect message; column 7, lines 32 – 50 of Wall). As to a thin client note the 112 rejection above.

As to claim 63, Humpleman as modified teaches notifying the remote device driver by the device manager that the driver service is no longer permitted to control the device (session manager 206 notifies services 230-238, via a disconnect message, which terminate their transmission of display commands to network terminal 202; column 7, lines 32 – 50 of Wall).

As to claim 65, Humpleman as modified teaches the terminal is a thin client (Human Interface Devices 702, Fig. 7; column 4, lines 38 – 67 of Wall) for providing an interface to a user (display and input device is a human interface device), the thin client is connected to the server via the network; and the server provides a plurality of computational services (computation functions) removed from the thin client to the user (one computer may have one or more services, or a service may be implemented by

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one or more computers...the service provides computation, state, and data to the HID's and the service is under the control of a common authority or manager; column 4, lines 38 – 67 of Wall). As to a thin client note the 112 rejection above.

As to claim 66, Humpleman as modified teaches the computational services (computational service providers) comprise a computational power for the thin client (HID) and a state maintenance for the thin client (computational Service Providers...the computational power and state maintenance is found in the service providers, or services...the service provides computation, state, and data to the HID's and the service is under the control of a common authority or manager; column 4, lines 57 – 67 of Wall). As to a thin client note the 112 rejection above.

As to claim 67, Humpleman as modified teaches the one or more driver services reside in the server (one computer may have one or more services, or a service may be implemented by one or more computers...the service provides computation, state, and data to the HID's and the service is under the control of a common authority or manager; column 4, lines 38 – 67 of Wall) and are separated (state and computation functions have been removed from the HID and reside on data sources or services; column 4, lines 38 – 67 of Wall) from the thin client (Human Interface Devices 702, Fig. 7; column 4, lines 38 – 67 of Wall) via the network. As to a thin client note the 112 rejection above.

As to claims 68 and 69, Humpleman as modified teaches the thin client (HID) can only operate the one or more remote devices (HID is the means by which users access the computational services provided by the services...HID consists of a display 726, a

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keyboard 724, mouse 725, and audio speakers 727...the HID includes the electronics need to interface these devices to the interconnection fabric and to transmit to and receive data from the services, Fig. 7; column 5, lines 18 – 25 of Wall) via the one or more driver services (remote service application) residing in the server domain (remote service application, column 11, line 50 – column 12, line 10; middleware layer 98 can be located in a third device 96 or in a separate control hub; column 16, lines 50 – 60 of Humpleman) coupled across a network (home network 10, Fig. 19 of Humpleman) and wherein the one or more remote devices are locally connected to the thin client (the interconnection fabric is any of multiple suitable communication paths for carrying data between the services and the HIDs...the interconnect fabric is a local area network; column 5, lines 8 – 18 of Wall). As to a thin client note the 112 rejection above.

As to claim 70, see the rejection to claim 36 above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,549,934 to Peterson teaches method and system for providing remote access and control of devices across a network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8am - 4:30pm.

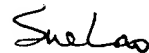
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The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Li B. Zhen
Examiner
Art Unit 2126



lbz
June 12, 2003